

**Notice of Allowability**

Application No.

10/763,834

Examiner

Allen T. Cao

Applicant(s)

GRANSTROM ET AL.

Art Unit

2627

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/22/04.
2. ☒ The allowed claim(s) is/are 1-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 1/22/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.



Allen Cao  
Primary Examiner

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1. Claims 1-30 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The prior art of record neither discloses nor suggests a transducer head apparatus having structural combination limitations including a sensor element having a plurality of terminal pads; and a shunt electrically connected with the sensor element in parallel for protecting the sensor element from electrical damage during fabrication of the transducing head, wherein the shunt comprises one or more fuses, the shunt configured to be repeatedly tested around during fabrication to allow testing of the sensor element, and wherein the shunt is structured to be permanently electrically removable prior to operation of the transducing head by directing a shunt removal current through the shunt which effectively creates an open circuit in the shunt without causing a damaging current to flow in the sensor element, all as set forth in claims 1 and 30.

The prior art neither discloses nor suggests a transducer head apparatus having structural combination limitations including a sensor element having a plurality of terminal pads and a sensor resistance; a shunt electrically connected with the sensor element in parallel, the shunt including a plurality of removable resistive elements, each resistive element having an element resistance; and an adjustable transducing head resistance defined by the sensor resistance and the element resistances, wherein sequential removal of some or all of the resistive elements establishes a desired transducing head resistance as recited in claim 28.

The prior art neither discloses nor suggests a transducer head apparatus having structural combination limitations including a sensor element; a first terminal pad and a second terminal pad electrically connected to the sensor element; and a shunt connected in parallel to the sensor element, the shunt including a first fuse, a second fuse, and a third terminal pad electrically connected between the first and second fuses, wherein the third terminal pad accepts current for temporary bypassing of the shunt and for permanent electrical removal of the shunt by directing a shunt removal current through the shunt which non-simultaneously effectively creates an open circuit in the first and second fuses, while at no point during electrical removal of the shunt is current in the sensor element permitted to reach a damaging level, as set forth in claim 29.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen T. Cao whose telephone number is (571) 272-7569. The examiner can normally be reached on Mon - Thurs (7:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Allen Cao  
Primary Examiner

AC  
June 14, 2006